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10/016,700	11/02/2001	David Carroll Challenger	RPS9 2001 0400 US2	4416

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EXAMINER

NGUYEN, CINDY

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/016,700

Applicant(s)

CHALLENGER, DAVID CARROLL

Examiner

Cindy Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15 and 18-26 is/are rejected.
- 7) ☐ Claim(s) 14, 16 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

This is in response to application filed on 11/02/01 in which claims 1-26 are presented for examination.

### *1. Information Disclosure Statement*

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Please submit the IDS "Trusted Computing Platform Alliance" that listed in the specification for further consideration .

### *2. Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 26 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

It is not clear to the Examiner, what is meant by “hashing the concatenation of the user authorization in the migratable storage tree with a fixed string”. The claimed “hashing the concatenation of the user authorization in the migratable storage tree with a fixed string” has not been described such that it would enable one skilled in the art to make and/or use the same

**3. *Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**4. Claims 1-13, 15, 18-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Microsoft Corporation “Microsoft Windows 2000 Public key infrastructure” update 04 1999.**

Regarding claims 1 and 18, Microsoft discloses: In a data processing system, a method comprising the steps of creating a migratable storage tree with a storage root key (page 3, paragraphs 3-6); and creating a non-migratable storage tree with the storage root key (page 3, paragraphs 3-6), wherein the migratable storage tree and the non-migratable storage tree are identically structured (page 3, paragraphs 3-6 and Certificate hierarchies describe on page 6).

Regarding claims 2 and 19, all the limitations of these claims have been noted in the rejection of claims 1 and 18. In addition, Microsoft discloses: wherein the migratable storage tree and the no migratable storage tree are created by a trusted computing module in accordance with Trusted Computing Platform Alliance (as Microsoft Window 2000 and page 6).

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Regarding claims 3 and 20, all the limitations of these claims have been noted in the rejection of claims 1 and 18. In addition, Microsoft discloses: wherein the migratable storage tree comprises migratable keys and a user key, wherein the non-migratable storage tree comprises non-migratable keys and a user key (page 3, paragraphs 3-6 and Certificate hierarchies describe on page 6).

Regarding claims 4 and 22, all the limitations of these claims have been noted in the rejection of claims 1 and 18. In addition, Microsoft discloses: wherein the non-migratable storage tree will include non-migratable storage keys corresponding to each migratable storage key in the migratable storage tree (Generating keys describe on page 8).

Regarding claims 5 and 24, all the limitations of these claims have been noted in the rejection of claims 1 and 18. In addition, Microsoft discloses: wherein use authorization in the non-migratable storage tree will be identical to use authorization in the migratable storage tree (Smart card logon describe on page 12).

Regarding claim 6, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Microsoft discloses: further comprising the steps of requesting a migratable storage key; and requesting a non-migratable storage key (Certificate enrollment describe on page 12).

Regarding claim 7, all the limitations of this claim have been noted in the rejection of claim 6. In addition, Microsoft discloses: wherein the step of requesting a migratable storage key will identify a parent key in the migratable storage tree, and wherein the step of requesting a non-migratable storage key will identify a parent key in the non-migratable storage tree that

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corresponds to the parent key in the migratable storage tree (Certificate enrollment describe on page 12).

Regarding claim 8, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Microsoft discloses: further comprising the step of: when a key loading request is made for a migratable storage key, loading a key from the non-migratable storage tree instead of loading a corresponding key from the migratable storage tree (page 5, paragraph 3).

As per claim 9, all the limitations of this claim have been noted in the rejection of claim 1. It is therefore rejected as set forth above.

Regarding claim 10, all the limitations of this claim have been noted in the rejection of claim 9. In addition, Microsoft discloses: wherein the migratable storage key and the non-migratable storage key are associated in a database (Public-key functionality describe on page 2).

Regarding claim 11, all the limitations of this claim have been noted in the rejection of claim 9. In addition, Microsoft discloses: wherein the non-migratable key is a multi-prime key (share secrets key on page 15 and IP security section).

Regarding claim 12, all the limitations of this claim have been noted in the rejection of claim 9. In addition, Microsoft discloses: where the non-migratable key is an elliptic curve key (page 2, paragraph 2).

Regarding claim 13, all the limitations of this claim have been noted in the rejection of claim 9. In addition, Microsoft discloses: further comprising the steps of: creating a new migratable signing key with the given authentication data and a third parent key (page 2 Digital signatures section); storing the new migratable signing key with the given authentication data

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and the third parent key (page 5, paragraph 3); storing the new migratable signing key with the given authentication data and a fourth parent key where the fourth parent key is a non-migratable key associated with the third parent key in a database (page 4, 2<sup>nd</sup> paragraph).

Regarding claim 15, all the limitations of this claim have been noted in the rejection of claim 9. In addition, Microsoft discloses: further comprising the steps of: creating a new data stored by means of the first parent key (page 2 Digital signatures section); storing the new data with the first parent key (page 5, paragraph 3); storing the new data with the second parent key where the second parent key is a non-migratable key associated with the third parent key in a database (page 4, 2<sup>nd</sup> paragraph).

Regarding claim 21, all the limitations of this claim have been noted in the rejection of claim 18 above. In addition, Microsoft discloses: wherein the migratable storage tree comprises migratable keys and encrypted user data wherein the non-migratable storage tree comprises non-migratable keys and encrypted user data (page 2, Secret key agreement via public key section).

Regarding claim 23, all the limitations of this claim have been noted in the rejection of claim 18 above. In addition, Microsoft discloses: wherein the non migratable storage tree will include non-migratable storage keys corresponding to a subset of the migratable storage keys in the migratable storage tree (page 16, 1<sup>st</sup> paragraph).

Regarding claim 25, all the limitations of this claim have been noted in the rejection of claim 18 above. In addition, Microsoft discloses: wherein use authorization in the non-migratable storage tree can be deduced from user authorization in the migratable storage tree with additional data (page 5, Certificate authorities section).

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Regarding claim 26, all the limitations of this claim have been noted in the rejection of claim 25 above. In addition, Microsoft discloses: wherein the use authorization in the non-migratable storage tree is obtained by hashing the concatenation of the user authorization in the migratable storage tree with a fixed string (page 2, digital signatures section).

#### **5. *Allowable Subject Matter***

Claims 14, 16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record and that encountered while searching for the claimed invention fails to anticipate and/or suggest: the method as recited in claim 13 and 15, further comprising the steps of loading a copy of the new migratable signing key stored in the key blob created with the non-migratable parent key as recited in claims 14 and 16.

Regarding claim 17 depends from claim 14 therefore objected.

#### **6. *Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Public key infrastructure, Streetman et al. , ATI IPT Special report 00-06, April 2000.

Lam (U.S 5564037). Real time data migration system and method employing sparse files.

Ginter et al. (U.S 6658568). Trusted infrastructure support system, method and techniques for secure electronic commerce transaction and rights management.



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Brown et al. (U.S 6618806). System and method for authenticating users in a computer network.

### **7. Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 703-305-4698. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

  
Cindy Nguyen  
January 11, 2004

  
WAYNE AMSBURY  
PRIMARY PATENT EXAMINER